

AMENDMENTS TO THE CLAIMS

The following listing of the claims replaces all previous listings and versions:

1. (Currently Amended) A function extension type browser comprising:
 - a document parser unit for converting document data into structured document information ~~according~~ in response to an instruction from an application program;
 - a document information manipulation unit for enabling the structured document information to be referred to from the application program;
 - a browser core unit for displaying a display document based on the structured document information ~~according~~ in response to an instruction from the application program; and
an event information informing unit ~~for~~, wherein:
 - when an event relating to ~~[[a]] the displayed~~ display document takes place, said event informing unit informs the application program of event information indicating a type of the event and a part of the display document where the event takes place.
2. (Currently Amended) The function extension type browser as claimed in claim 1, wherein the application program is a program to be downloaded when ~~a function is extended~~ an information service requiring an extension of a markup language or meta-information is used.
3. (Currently Amended) The function extension type browser as claimed in claim 1, wherein the document information manipulation unit has a function of editing the structured document information ~~according~~ in response to an instruction from the application program.
4. (Original) The function extension type browser as claimed in claim 1, wherein the application program has a function of, when the event information is informed from the event information informing unit, referring to the structured document information by using the document information manipulation unit, obtaining a content of a node relating to the part where the event takes place among nodes being components of the structured document information, and performing processing according to the type of the event indicated by the informed event information and the obtained content of the node.

5. (Original) The function extension type browser as claimed in claim 1, wherein the application program has a function of, when the event information is informed from the event information informing unit, referring to the structured document information by using the document information manipulation unit, obtaining a content of a node relating to the part indicated by the event information among nodes being components of the structured document information, and when the obtained content of the node relates to a proprietary tag or a proprietary attribute, performing processing in accordance with the obtained content of the node and the type of the event indicated by the event information.

6. (Original) The function extension type browser as claimed in claim 5, wherein the processing performed in accordance with the obtained content of the node and the type of the event indicated by the event information is voice production processing.

7. (Currently Amended) The function extension type browser as claimed in claim 3, wherein the application program has:

a function of instructing the document information manipulation unit ~~on~~ regarding a node intended to be edited, said node from among nodes being components of the structured document information, ~~as well as~~ and instructing the document information manipulation unit regarding a content of the editing, and

a function of, when the event information ~~is informed from the event~~ information informing unit notifies said application program of a type of an event, referring to the structured document information using the document information manipulation unit, obtaining a content of a said node relating to the part indicated by the event information informing unit among the nodes being the components of the structured document information, and performing processing according to the type of the event indicated by the ~~informed~~ event information informing unit and the obtained content of the node.

8. (Original) The function extension type browser as claimed in claim 3, wherein the application program includes:

a function of instructing the document information manipulation unit on

a node intended to be edited, among nodes being components of the structured document information, as well as a content of the editing, and

a function of, when the event information is informed from the event information informing unit, referring to the structured document information using the document information manipulation unit, obtaining a content of a node relating to the part indicated by the event information among the nodes being the components of the structured document information, and if the obtained content of the node is a proprietary tag or a proprietary attribute which are uniquely extended, performing processing according to the obtained content of the node and the type of the event indicated by the event information.

9. (Original) The function extension type browser as claimed in claim 8, wherein the event information informing unit has a function of, when an event relating to a document to be displayed takes place, informing the application program of event information indicating a type of the event, and the application program has a function of, when the event information is informed from the event information informing unit, instructing the document information manipulation unit on a node intended to be edited among nodes being components of the structured document information corresponding to the document to be displayed as well as a content of the editing.

10. (Currently Amended) The function extension type browser as claimed in claim 8, wherein

the node intended to be edited is a node corresponding to the proprietary tag or the proprietary attribute which are uniquely extended attributes not existent in a current markup language, the content of the editing is to cause the node corresponding to the proprietary tag or the proprietary attribute to be a comment node, and

the processing performed according to the proprietary tag or the proprietary attribute is voice production processing.

11. (Currently Amended) The function extension type browser as claimed in claim 9, wherein

the node intended to be edited is a node corresponding to the

proprietary tag or the proprietary attribute which are uniquely extended attributes not existent in a current markup language, the content of the editing is to cause the node corresponding to the proprietary tag or the proprietary attribute to be a comment node, and the processing performed according to the proprietary tag or the proprietary attribute is voice production processing.

12. (Original) The function extension type browser as claimed in claim 1, wherein the application program has a function of, when the event information is informed from the event information informing unit, referring to the structured document information by using the document information manipulation unit, obtaining a content of a node corresponding to the part indicated by the event information among nodes being components of the structured document information, and based on the obtained content, creating meta-information in a format not supported by the function extension type browser.

13. (Original) The function extension type browser as claimed in claim 1, wherein the application program has:

a function of, according to the event information informed from the event information informing unit, creating an HTTP request header in a format not supported by the browser core unit and issuing an HTTP request including the created HTTP request header, and

a function of obtaining document data and performing processing relating to an HTTP response header accompanying the document data.

14. (Original) The function extension type browser as claimed in claim 13, wherein the HTTP response header and the HTTP request header handled by the application program are an HTTP response header and an HTTP request header relating to a cookie.

15. (Original) The function extension type browser as claimed in claim 1, wherein the application program has a function of analyzing document data in a format not supported by the document parser unit, and based on an analysis result, creating structured document information by using the document information manipulation unit.

16. (Original) The function extension type browser as claimed in claim 1, comprising a memory for storing the application program.

17. (Original) The function extension type browser as claimed in claim 3, wherein the structured document information which is used by the browser to display the document is edited at the document information manipulation unit.

18. (Currently Amended) A browser component being components of a function extension type browser, wherein the function extension type browser comprising:

a document information manipulation unit for enabling the structured document information to be referred to from the application program;

a browser core unit for displaying a document based on the structured document information according to an instruction from the application program; and an event information informing unit for, when an event relating to the displayed document takes place, informing the application program of event information indicating a type of the event and a part of the document where the event takes place; wherein:

the browser component ~~has a function of converting~~ converts document data into structured document information ~~according in response~~ to an instruction from an application program.

19. (Currently Amended) A browser component being components of a function extension type browser, wherein the function extension type browser comprising:

a document parser unit for converting document data into structured document information according to an instruction from an application program;

a browser core unit for displaying a document based on the structured document information according to an instruction from the application program; and

an event information informing unit for, when an event relating to the displayed document takes place, informing the application program of event information indicating a type of the event and a part of the document where the event takes place; wherein: the browser component ~~has a function of enabling~~ enables the structured document information to be referred to from the application program.

20. (Currently Amended) A browser component being components of a function extension type browser, wherein the function extension type browser comprising:

a document parser unit for converting document data into structured document information according to an instruction from an application program;

a document information manipulation unit for enabling the structured document information to be referred to from the application program; and

a browser core unit for displaying a document based on the structured document information according to an instruction from the application program; wherein: the browser component ~~has a function of~~, when an event relating to the displayed document takes place, informs ~~informing~~ the application program of event information indicating a type of the event and a part of the document where the event takes place.

21. (Currently Amended) A browser component being components of a function extension type browser, wherein the function extension type browser comprising:

a document information manipulation unit for enabling structured document information to be referred to from the application program and editing the structured document information according to an instruction ~~from~~ from the application program;

a browser core unit for displaying a document based on the structured document information edited in the document information manipulation unit according to an instruction from the application program; and

an event information informing unit for, when an event relating to a displayed document takes place, informing the application program of event information indicating a type of the event and a part of the document where the event takes place; wherein: the browser component ~~has a function of converting~~ converts document data into structured document information ~~according~~ in response to an instruction from the application program.

22. (Currently Amended) A browser component being components of a function extension type browser, wherein the function extension type browser comprising:

a document parser unit for converting document data into structured document information according to an instruction from an application program;

a browser core unit for displaying a document based on the structured document information edited according to an instruction from the application program; and
an event information informing unit for, when an event relating to a displayed document takes place, informing the application program of event information indicating a type of the event and a part of the document where the event takes place; wherein:
the browser component ~~has a function of enabling~~ enables the structured document information to be referred to from the application program and ~~editing~~ edits the structured document information ~~according in response~~ to an instruction from the application program.

23. (Currently Amended) A browser component being components of a function extension type browser, wherein the function extension type browser comprising:

a document parser unit for converting document data into structured document information according to an instruction from an application program;

a document information manipulation unit for enabling the structured document information to be referred to from the application program and editing the structured document information according to an instruction from the application program; and

a browser core unit for displaying a document based on the structured document information edited in the document information manipulation unit according to an instruction from the application program; wherein

the browser component ~~has a function of~~, when an event relating to a displayed document takes place, ~~informing~~ informs the application program of event information indicating a type of the event and a part of the document where the event takes place.

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (New) A program storage device, tangibly embodying a program of instructions executable by a machine for performing a method comprising the steps of:

converting document data into structured document information according to an instruction from an application program;
enabling the structured document information to be referred to from

the application program; displaying a document based on the structured document information according to an instruction from the application program; and when an event relating to a displayed document takes place, informing the application program of event information indicating a type of the event and a part of the document where the event takes place.

29. (New) A program storage device, tangibly embodying a program of instructions executable by a machine for performing a method comprising the steps of:

converting document data into structured document information according to an instruction from an application program; enabling the structured document information to be referred to from the application program and editing the structured document information according to an instruction from the application program; displaying a document based on the structured document information according to another instruction from the application program; and when an event relating to a displayed document takes place, informing the application program of event information indicating a type of the event and a part of the document where the even takes place.